

**Montana Board of Oil and Gas Conservation  
Environmental Assessment**

**Operator:** KeeSun Corporation  
**Well Name/Number:** #2-12 Hjartarsen  
**Location:** NW NE Section 12 T32N R5W  
**County:** Glacier MT; **Field (or Wildcat)** Wildcat

**Air Quality**

(possible concerns)

Long drilling time: No, 3 to 4 days drilling time.

Unusually deep drilling (high horsepower rig): No, small single derrick drilling rig to drill to 2900' TD.

Possible H<sub>2</sub>S gas production: None anticipated.

In/near Class I air quality area: No Class I air quality area.

Air quality permit for flaring/venting (if productive): Yes, DEQ air quality permit required under 75-2-211.

Mitigation:

☒ Air quality permit (AQB review)

☐ Gas plants/pipelines available for sour gas

☐ Special equipment/procedures requirements

☐ Other: \_\_\_\_\_

Comments: No special concerns – using small rig to drill to 2900' TD.

**Water Quality**

(possible concerns)

Salt/oil based mud: No, freshwater, freshwater mud system, air, air mist.

High water table: No high water table anticipated.

Surface drainage leads to live water: None only unnamed ephemeral drainages close by.

Water well contamination: No, closest water well is about 7/8 of a mile to the east of this location. Depth of water well is 10'. Surface casing in this well will be drilled with air or freshwater and steel surface casing set at 300' and cemented to surface.

Porous/permeable soils: No, sandy silty bentonitic clay soils.

Class I stream drainage: No, Class I stream drainages nearby.

Mitigation:

☐ Lined reserve pit

☒ Adequate surface casing

☐ Berms/dykes, re-routed drainage

☐ Closed mud system

☐ Off-site disposal of solids/liquids (in approved facility)

☐ Other: \_\_\_\_\_

Comments: 300' of surface casing cemented to surface adequate to protect freshwater zones. Also, freshwater, freshwater mud and air/air mist systems to be used.

**Soils/Vegetation/Land Use**

(possible concerns)

Stream crossings: No, stream crossings, only ephemeral drainages.

High erosion potential: No, no cut, up to 0.0' and small fill, up to 4.0', required.  
Loss of soil productivity: No, location will be restored after drilling, if nonproductive. If productive unused portion of drillsite will be reclaimed.  
Unusually large wellsite: No, 200'X200' location size required.  
Damage to improvements: Slight, cultivated (CRP) land.  
Conflict with existing land use/values: Slight

Mitigation

- ☐ Avoid improvements (topographic tolerance)
- ☐ Exception location requested
- ☒ Stockpile topsoil
- ☐ Stream Crossing Permit (other agency review)
- ☒ Reclaim unused part of wellsite if productive
- ☐ Special construction methods to enhance reclamation
- ☐ Other \_\_\_\_\_

Comments: Access will be over existing county road, East Marias Road and existing two track section line/ranch road. About 1000' of new access will be built into this location from the two track ranch road. Cuttings will be buried in and unlined earthen pit. Drilling fluids if used will be allowed to dry in the pit. Pits will be backfilled after drying. No special concerns

### Health Hazards/Noise

(possible concerns)

Proximity to public facilities/residences: Closest residences are over 1 mile in any direction from this location. The town of Ethridge, Montana is about 1.5 miles to the northeast of this location.

Possibility of H<sub>2</sub>S: None anticipated.

Size of rig/length of drilling time: Small drilling rig/short 3 to 4 days drilling time.

Mitigation:

- ☒ Proper BOP equipment
- ☐ Topographic sound barriers
- ☐ H<sub>2</sub>S contingency and/or evacuation plan
- ☐ Special equipment/procedures requirements
- ☐ Other: \_\_\_\_\_

Comments: Sufficient surface casing and operational BOP should mitigate any problems. No concerns

### Wildlife/recreation

(possible concerns)

Proximity to sensitive wildlife areas (DFWP identified): None identified.

Proximity to recreation sites: None identified.

Creation of new access to wildlife habitat: No

Conflict with game range/refuge management: No

Threatened or endangered Species: Species listed as threatened or endangered in Glacier County are the Grizzly Bear, Canada Lynx and the Bull Trout. .

Mitigation:

- ☐ Avoidance (topographic tolerance/exception)
- ☐ Other agency review (DFWP, federal agencies, DSL)
- ☐ Screening/fencing of pits, drillsite
- ☐ Other: \_\_\_\_\_

Comments: Private cultivated (CRP) surface lands. Grizzly Bear, Canada Lynx and Bull Trout do not inhabit this area. No concerns

### Historical/Cultural/Paleontological

(possible concerns)

Proximity to known sites: None identified

Mitigation

   avoidance (topographic tolerance, location exception)

   other agency review (SHPO, DSL, federal agencies)

   Other: \_\_\_\_\_

Comments: Private cultivated (CRP) surface lands. No bear, lynx or trout habitat. No concerns.

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### Social/Economic

(possible concerns)

   Substantial effect on tax base

   Create demand for new governmental services

   Population increase or relocation

Comments: No concerns, this well is a wildcat test well which may not encounter commercial production.

### Remarks or Special Concerns for this site

Well is a 2900' Cut Bank Formation gas test.

### Summary: Evaluation of Impacts and Cumulative effects

No long term impacts expected. Some short term impacts will occur, but can be mitigated.

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I conclude that the approval of the subject Notice of Intent to Drill (does/**does not**) constitute a major action of state government significantly affecting the quality of the human environment, and (does/**does not**) require the preparation of an environmental impact statement.

Prepared by (BOGC): /s/ Steven Sasaki \_\_\_\_\_

(title:) Chief Field Inspector

Date: March 29, 2010

Other Persons Contacted:

Montana Bureau of Mines and Geology, GWIC website

(Name and Agency)

Glacier County water wells.

(subject discussed)

March 10, 2010

(date)

US Fish and Wildlife, Region 6 website

(Name and Agency)

ENDANGERED, THREATENED, PROPOSED AND CANDIDATE SPECIES

MONTANA COUNTIES, Glacier County

(subject discussed)

March 10, 2010

(date)

If location was inspected before permit approval:

Inspection date: March 24, 2010

Inspector: Bill Halvorson

Others present during inspection: \_\_\_\_\_